

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Karola Richter et al.

Serial No: 10 / 553 728

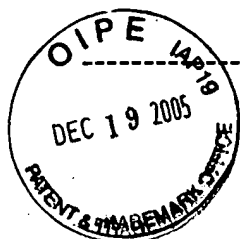
Art Unit:

Filing Date: October 14, 2005

Title: SILICON SUBSTRATE COMPRISING POSITIVE ETCHING PROFILES  
WITH A DEFINED SLOPE ANGLE, AND PRODUCTION METHOD.

December 14, 2005

Attorney's Docket No.: HMP201T3



TRANSMITTAL LETTER

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313

SIR:

Transmitted herewith for filing is:

<X> Information Disclosure Statement dated December 13, 2005 (2 pages)

<X> Printed documents: US 4902377.; US 4855017; JP 08186095 ; JP 040228229;

J. Vac. Sci Technol. A 17 (4) Jul/Aug 1999 (Deep anisotropic etching of silicon);

J. Vac. Sci Technol. A 17 (4) Jul/Aug 1999 (Application of the footing effect in the micromachining ...);

J. Vac. Sci Technol. A 17 Nov/Dec 1999 (Fabrication of two dimensional photonic crystal ... );

SPIE Volume 2639;

J. Electrochem Soc., Vol 140, No. September 1993 (Spray etching of Silicon ...);

J. Electrochem Soc., Vol 137, No 11, November 1990 ( Anisotropic Etching of Crystalline ...);

J. Electrochem Soc., Vol. 145, No. 7, July 1998 (Aqueous KOH Etching ...);

J. Vac. Sci Technol. B 13 (6) Nov/Dec 1995 (Reactive ion etching...);

J. Vac. Sci Technol. B 13 (6) Nov/Dec 1995 (Dry etching ...);

J. Appl. Phys. 80 (5), 1 September 1996 ( Highly selective etching ...);

The Reaserch Institute of Plasma Chemistry and Technology (Fundamentals ...).

< > Fees in the amount of \$ are to be charged to a credit card. Form PTO-2038 is enclosed

(X) The applicant hereby petitions the Commissioner of Patents and Trademarks to extend the time for response to any Office Action outstanding in the above captioned matter as necessary to avoid abandonment of the application. Please charge my deposit account No.11-0224 in the amount required to cover the cost of the extension. Any deficiency or overpayment should be charged or credited to the above account.

(X) The Commissioner is hereby authorized to charge any fees under 37 CFR 1.16, and 1.17, after a mailing of a Notice of Allowance under 37 CFR 1.18 or any additional fees which may be required during the entire pendency of the application, or credit any overpayment, to Acct. No.11-0224. A duplicate copy of this sheet is enclosed. If and only if account funds should be insufficient, immediately contact our associate, Lisa Zumwalt, at (703)415-0579, who will pay immediately to avoid deprivation of rights.

( ) Please charge my Deposit Account No.11-0224 in the amount of \$ \_\_\_\_\_. A duplicate copy of this sheet is enclosed.  
A signature or signatures required for the above recited document(s) is (are) provided herebelow. Such signature(s) also provide(s)  
ratification for any required signature appearing to be defective in the above recited document(s).

*Horst M. Kasper*

Horst M. Kasper, 13 Forest Drive, Warren, N.J.07059  
Reg. No. 28,559 Tel.(908)526-1717

**CERTIFICATE OF MAILING:**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313

on 16 DEC 2005

Signature: *H. Kasper* Date: 16 DEC 2005

/SN-



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Karola Richter et al.  
Serial No: 10/553,728  
Filing Date: October 14, 2005  
Title: SILICON SUBSTRATE COMPRISING POSITIVE ETCHING PROFILES  
WITH A DEFINED SLOPE, ANGLE, AND PRODUCTION METHOD  
Examiner: Art Unit:

Dezember 13, 2005

HMP201S2

## INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR § 1.97.

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

SIR:

Additional references have come to the attention of the applicants in the instant case.

Copies of these references pertaining to this application are attached.

The attorney understands that the applicants believe that these references are not closer to the present invention than the state of the art which is otherwise present in the file of this case.

The following is a listing of the references in question:

- US 4902377
- US 4855017
- JP 08186095
- JP 040228229
- Publication: J. Vac. Sci Technol. A 17 (4) Jul/Aug 1999 (Deep anisotropic etching of silicon)
- Publication: J. Vac. Sci Technol. A 17 (4) Jul/Aug 1999 (Application of the footing effect in the micromachining ...)
- Publication: J. Vac. Sci Technol. A 17 Nov/Dec 1999 (Fabrication of two dimensional photonic crystal ...)
- SPIE Volume 2639

Applicants have filed an information disclosure statement on October 14, 2005. With this information disclosure statement dated December 13 applicants are submitting following disclosure documents, which were not available at the time of filing:


- J. Electrochem Soc., Vol 140, No. September 1993 (Spray etching of Silicon ...)
- J. Electrochem Soc., Vol 137, No 11, November 1990 ( Anisotropic Etching of Crystalline ...)
- J. Electrochem Soc., Vol. 145, No. 7, July 1998 (Aqueous KOH Etching ...)
- J. Vac. Sci Technol. B 13 (6) Nov/Dec 1995 (Reactive ion etching...)
- J. Vac. Sci Technol. B 13 (6) Nov/Dec 1995 (Dry etching ...)
- J. Appl. Phys. 80 (5), 1 September 1996 ( Highly selective etching ...)
- The Reaserch Institute of Plasma Chemistry and Technology (Fundamentals ...)

The above recited references taken alone or in combination are believed to neither anticipate nor to render obvious the present application.

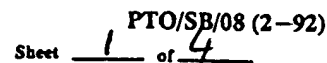
Consideration of these references is solicited.

Respectfully submitted,

Karola Richter et al.

By:   
\_\_\_\_\_  
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Tel.:(908)526-1717 Fax:(908)526-6977  
Reg. No. 28,559; Docket No.: HMP201

/sn-



### Group Art Unit

## Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



### Group Art Unit

[illegible][illegible]

	SEIDEL et al. "Anisotropic etching of crystalline Silicon..."
	J. Electrochem. Soc., Vol. 137, No. 11, November 1990 pp 3612-3621
	Kim et al, "Aqueous KOH Etching of Silicon..."
	J. Electrochem. Soc., Vol. 145, No. 7, July 1998, pp. 2499-2508
	RANGELOW et al, "Reactive ion etching for microelectrical..."
	J. Vac. Sci. Technol., B13 (6) Nov/Dec 1995 pp. 2394-2399

DATE CONSIDERED

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Sheet 4 of 4

Form PTO-1449 <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> (Use several sheets if necessary)	Docket Number (Optional) <u>HMP 201</u>	Application Number <u>10/553,728</u>
	Applicant <u>RICHTER et al</u>	
	Filing Date <u>10/14/05</u>	Group Art Unit

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

	VOLLAND et al. "DRY ETCHING WITH GAS HOPPING ..."
	J. VAC. Sci. Technol. B 17(6) Nov/Dec 1999 pp 2768-2771
	BOEING, "Fundamentals of Plasma Chemistry and Technology"
	The Research Institute of Plasma Chemistry, Culbuck, CA, p. 174
	CHANG et al, "Highly selective etching for polysilicon..."
	J. Appl. Phys. 80(5), 1 September 1996 pp 3048-3055

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.